

WHAT IS CLAIMED IS:

1. A scale for technical devices which are used for high-resolution or ultrahigh-resolution imaging of structures, the scale comprising:  
a plurality of crystalline or amorphous first material layers having a first thickness; and  
a plurality of crystalline or amorphous second material layers which are distinguishable from the first material layers when imaged using high-resolution or ultrahigh-resolution imaging methods, the second material layers having a second thickness and the first material layers alternating with the second material layers;  
at least one of the first or second material layers having a thickness of less than twenty-five nanometers.
2. The scale as recited in claim 1 wherein the first material layers have a different strain than the second material layers.
3. The scale as recited in claim 1 wherein both the first and second material layers have a thickness of fewer than ten nanometers.
4. The scale as recited in claim 1 wherein the first and second material layers have different band gaps.
5. The scale as recited in claim 1 further comprising a plurality of third material layers having a third thickness different from the second thickness and a plurality of fourth material layers having the same thickness as the first thickness, the third material layers alternating with the fourth material layers.